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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/557,750

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Pekka Nikander

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EXAMINER

THAO, CHIEAN K

ART UNIT

PAPER NUMBER

4172

MAIL DATE

DELIVERY MODE

12/18/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/557,750

**Applicant(s)**

NIKANDER ET AL.

**Examiner**

CHHEAN THAO

**Art Unit**

4172

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on October 30, 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-850)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 11/21/2005

Detail Office Action

1. Claims 1-11 (cancelled).
2. Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -  
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 35 l(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 12-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Haverinen (US 7107620 B2).

Regarding **claim 12**, Haverinen discloses a method of securely initializing subscriber and security data in a mobile routing system when the subscribers are also subscribers of a radio communication network, the method comprising: within the mobile routing system, authenticating subscribers to the mobile routing system using an authentication procedure defined for the radio communication network, collecting subscriber information from relevant nodes of the radio network, and agreeing upon keys by which further communications between the subscribers and the mobile routing system can take place (**authenticating mobile node to a packet data network, column 3 and lines 7-21**); and using said subscriber information and keys in the provision of mobility services to subscriber mobile nodes and correspondent nodes (**sending and checking the first response for authenticating the mobile node, column 3 lines 29-35**).

Regarding **claim 13**, Haverinen discloses a method according to claim 12 and comprising transporting messages associated with said step of authenticating subscribers to the mobile routing system, between the mobile node used by a subscriber and an authentication server of the subscriber's home network, via a mobility server (**column 4 lines 50-67**).

Regarding **claim 14**, Haverinen discloses a method according to claim 13 and comprising collecting subscriber information from relevant nodes of the mobile network at the mobility server, and receiving a shared secret or secrets from the authentication server following completion of the re-run authentication procedure (known by mobile node and by the packet data network, **column 4 lines 11-15**).

Regarding **claim 15**, Haverinen discloses a method according to claim 14 and comprising sending session keys, agreed upon during the re-run authentication procedure, from the authentication server to the mobility server (session keys, **column 4 lines 14-17**).

Regarding to **claim 16**, Haverinen discloses a method according to claim 13, wherein the mobile routing system is a MobileIP based system, and the mobility server is a Home Agent (packet data network is IP network, **column 4 line 18**; Gateway (i.e., router; HA is a router), **Column 5, line 44**).

Regarding **claim 17**, Haverinen discloses a method according to claim 13, wherein the mobile routing system is a HIP based system and the mobility server is a Forwarding Agent (**column 28 lines 55-60, where Haverinen discuss public key technique, therefore HIP based system**; Gateway (i.e., router, therefore a Forwarding Agent), **Column 5, line 44**).

Regarding **claim 18**, Haverinen discloses a method according to claim 12, wherein said authentication procedure is the Authentication and Key Agreement procedure (**column 4, line 11**).

Regarding **claim 19**, Haverinen discloses a method according to claim 12, wherein the collected subscriber information comprises one or more of the following: the name and postal address of the subscriber; the telephone number associated with the subscriber; the existing Fully Qualified Domain Name for the subscriber; and the status of any mobility services established earlier for the subscriber

(Network Access Identifier domain name for the subscriber, **Column 3 line 39, and column 10 lines 19-22**).

Regarding **claim 20**, Haverinen discloses a method of operating a mobile node for use in a mobile radio communication system, the method comprising: initiating an authentication procedure defined for the radio communication network, for the purpose of authenticating the mobile node to a mobile routing system, and conducting said procedure with an authentication server via a mobility server of the mobile routing system (authenticate gateway, mobility server, to the mobile node; **column 6 lines 45-47**).

Regarding **claim 21**, Haverinen discloses a method of operating a mobility server of a mobile routing system, the method comprising: relaying messages associated with an authentication procedure, between a mobile node and an authentication node(**column 10 lines 15-24**); following completion of said procedure, receiving a shared secret from the authentication server, and collecting subscriber information from the authentication server and/or other network nodes; and using said subscriber information and keys in the provision of mobility services to subscriber mobile nodes (**column 4 lines 53-65**).

Regarding **claim 22**, Haverinen discloses a method of operating an authentication server of a mobile radio communication network, the method comprising: conducting an authentication procedure with a mobile node via a mobility server (**Gateway acting as an interface and receiving a mobile node identity, column 5 lines 44-54**); and sending a shared secret resulting from said procedure to said mobility server (**cryptographic information, subscriber shared secret identity, column 5 lines 56-67**).

The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure. Miernik (US 7177641 B1), Li (US 20020031107 A1), Patel (US 6591364 B1), Brown (US 5537474 A), Abrol (US 6785823 B1), and Carroll (US 7418596 B1) also disclose authentication methods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chhean Thao whose telephone number is 571-270-7497. The examiner can normally be reached on Monday-Friday 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis G. West can be reached on 571-272-7859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/CHHEAN THAO/

Examiner, Art Unit 4172

/Lewis G. West/

Supervisory Patent Examiner, Art Unit 4172